In the Claims:

Claim 1 (Currently Amended): A method for inhibiting or delaying apoptosis in vitro in a cell, comprising administering to said cell an agent that is capable of inhibiting an apoptosis-induced DHS catalyzed chemical reaction, wherein said inhibiting apoptosis-induced DHS catalyzed chemical reaction reduces levels of activated apoptosis-induced eIF-5A or inhibits activation of apoptosis-induced eIF-5A; and wherein said reduction of apoptosis-induced eIF-5A or inhibition of activation of apoptosis-induced eIF-5A inhibits or delays apoptosis.

Claims 2-10 (canceled)

Claim 11 (previously presented): The method of claim 1, wherein said chemical or drug comprises spermidine, 1,3-Diamino-propane, 1,4-Diamino-butane (putrescine), 1,7-Diamino-heptane, or 1,8-Diamino-octane.

Claims 12-86 (canceled)

Claim 87 (currently amended): A method for inhibiting or suppressing activation of apoptosis-induced eIF-5A in a cell comprising administering an agent to the cell that is capable of inhibiting DHS catalyzed chemical reactions, wherein the agent is selected from the group consisting of spermidine, 1,3-Diamino-propane, 1,4-Diamino-butane (putrescine), 1,7-Diamino-heptane, and 1,8-Diamino-octane; and
wherein the agent is not administered at toxic levels; and
wherein the inhibiting apoptosis-induced DHS catalyzed chemical reactions inhibits or reduces an apoptosis cascade, said cascade comprising transferring a 4-aminobutyl residue from a spermidine to a ε-amino group of a conserved lysine on an inactive apoptosis-induced ~~Factor~~ eIF-5A, said transferring converting the lysine to a deoxyhypusine, and wherein a deoxyhypusine

hydroxylase converts the deoxyhypusine to hypusine[[,]];
and wherein inhibition or reduction of said apoptosis cascade reduces an amount of activated apoptosis-induced eIF-5A or inhibits activation of apoptosis-induced eIF-5A in the cell.

Claim 88 (new): A method for inhibiting or delaying apoptosis in a mammalian cell, comprising administering to said cell an agent that is capable of inhibiting an apoptosis-induced DHS catalyzed chemical reaction, wherein the agent is spermidine, 1,3-Diamino-propane, 1,4-Diamino-butane (putrescine), 1,7-Diamino-heptane, or 1,8-Diamino-octane; and
wherein the agent is not administered at toxic levels; and
wherein said inhibiting apoptosis-induced DHS catalyzed chemical reaction reduces levels of activated apoptosis-induced eIF-5A or inhibits activation of apoptosis-induced eIF-5A; and
wherein said reduction of apoptosis-induced eIF-5A or inhibition of activation of apoptosis-induced eIF-5A inhibits or delays apoptosis in said cell.

Claim 89 (new): A method for inhibiting or delaying apoptosis in rat corpus luteum, comprising administering to said cell spermidine,
wherein the spermidine inhibits an apoptosis-induced DHS catalyzed chemical reaction to reduce levels of activated apoptosis-induced eIF-5A or to inhibit activation of apoptosis-induced eIF-5A; and
wherein said reduction of apoptosis-induced eIF-5A or inhibition of activation of apoptosis-induced eIF-5A inhibits or delays apoptosis.